

SYSTEM AND METHOD FOR STEPPED CAPACITY MODULATION IN A REFRIGERATION SYSTEM

ABSTRACT OF THE DISCLOSURE

A control system is provided for generating discrete stepped output capacities in a refrigeration system. The refrigeration system is preferably a multi-evaporator system having two or more multi-capacity compressors. The multi-capacity compressors can be any kind of reciprocating compressor or scroll compressor that can provide two or more different output capacities. The contributions of the compressors to the overall system capacity can be equal, or more preferably, they can be unequal, i.e., one compressor provides more capacity than the other compressor(s). The control system generates the stepped capacities of the refrigeration system by configuring and controlling the operation of the compressors and the output capacity provided by the compressors.